REMARKS

Claims 1-19 are pending in this application. By this Amendment, claims 1-10 are amended and claims 11-19 are newly added. Claims 1-10 have been amended to clarify the language and the intended meaning of the claims. Support for the amendments to claims 1-10 may be found, for example, in FIG. 1, and on pages 3-6 of the specification. No new matter has been added. Reconsideration and allowance of the present application based on the following amendments and remarks are respectfully requested.

Applicant notes that claim 4 has not been rejected under 35 U.S.C. §102 or 35 U.S.C. §103. Accordingly, Applicant respectfully submits that claim 4 contains allowable subject matter. Claim 11 corresponds to claim 4 written in independent form.

The drawings were objected to under 37 C.F.R. 1.83(a). The objection to the drawings is respectfully traversed. Claims 1-10, as amended, recite a system for control and supervision of residential control in a broadband network comprising a plurality of hardware and software broadband network dedicated units. For reference, FIG. 1 illustrates different units (*e.g.*, units 22, 24, 26, 28 and 30) that may constitute the claimed system. Applicant notes that these units are configured to perform/provide, *inter alia*, the several functions/features that are recited in claims 1-10. In that regard, the Examiner's attention is directed to page 5, lines 6-9, where it is indicated that "...the following features [are] provided by hardware and software broadband network dedicated means M2, 22, 24, 26, 28 and 30." Therefore, it is respectfully submitted that FIG. 1 shows each and every feature of the invention specified in the claims. Accordingly, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

Claims 1-3, 8 and 10 were objected to for various informalities. In response, claims 1-3, 8 and 10 have been amended to remove the informalities noted in the Office Action. It is respectfully submitted that the amendments to claims 1-3, 8 and 10 obviate the grounds for the objection. Accordingly, reconsideration and withdrawal of the objection to claims 1-3, 8 and 10 are respectfully requested.

Claims 1-10 were rejected under 35 U.S.C. 112, first paragraph. The rejection is respectfully traversed.

In connection with the rejection, the Office Action contends that "since the specification does not set forth any steps involved in the system to put the claimed invention into practice it is unclear what system the applicant is intending to encompass by making use of an 'abuse and anti-spoof protection...in real time' (as recited in claim 1) and '...real time traffic analyzing detecting unauthorized servers run by a customer and software which provides network address translation' (as recited in claim 4)" In response, Applicant notes that the specification teaches those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation since all that is necessary is that one skilled in the art be able to practice the claimed invention, given the level of knowledge of one skilled in the art in accordance with MPEP 2164.08. In particular, it is respectfully submitted that one of ordinary skill in the art would clearly understand from the specification that the system the applicant is intending to encompass is a system of the type illustrated in FIG. 1. This system includes a plurality of units configured to provide several functions/features that can be used to control and supervise a broadband network, which may be, for example, a broadband over ethernet® network or the like. (See page 1). Accordingly, reconsideration and withdrawal of the rejection of claims 1-10 under 35 U.S.C. §112, first paragraph, are respectfully requested.

Claims 1-10 were rejected under 35 U.S.C. §112, second paragraph. The rejection is respectfully traversed. It is respectfully submitted that the amendment to claim 1 fully obviates the grounds for the rejection. Applicant notes that the term "means" has been replaced by "unit" and that the languages "(M2, 22, 24, 28, 30)" and "...at least one of the following features..." have been deleted from claim 1. It is respectfully submitted that no new matter has been added and that the amendment to claim 1 fully obviates the grounds for the rejection. Accordingly, reconsideration and withdrawal of the rejection of claims 1-10 under 35 U.S.C. §112, second paragraph, are respectfully requested.

Claims 1 and 7 were rejected under 35 U.S.C. §102(e) based on U.S. Pat. No. 6,686,894 to Short *et al.* ("Short"). The rejection is respectfully traversed. It is respectfully submitted that the amendment to claim 1 fully obviates the grounds for the rejection.

Claim 1, as amended, is patentable over Short at least because this claim recites a system for control and supervision of residential control in a broadband network comprising a plurality of hardware and software broadband network dedicated units, including at least a

protocol server, and a membership server, wherein in order to provide service differentiation for customers, said plurality of units is configured to control a port by feeding a protocol server for auto-configuration of client network parameters with information from the membership policy server, said policy server providing that each network customer address can be connected to a unique name of a port for one customer inside the network; to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, said protocol server keeping a record of all assigned addresses to said policy server; and to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Short does not describe a system including these features. Therefore, Short does not describe each and every feature recited by claim 1 and, as a result, cannot anticipate this claim.

Short discloses a system that includes a gateway device for receiving a request from a user for access to the destination network, and a user profile database comprising stored access information and in communication with the gateway device. (see col. 4, lines 38-42) Short also discloses that the system is configured to redirect users to a portal page where users have transparent access to a computer network utilizing the gateway device. (see col. 3, lines 41-45) However, Short does not disclose, teach or suggest a system that (1) controls a port by feeding a protocol server for auto-configuration of client network parameters with information from the membership policy server, the policy server providing that each network customer address can be connected to a unique name of a port for one customer inside the network or (2) assures a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, said protocol server keeping a record of all assigned addresses to said policy server or (3) provides abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Claim 7 is patentable over Short by virtue of its dependency from claim 1, and for the additional features recited therein. Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 7 under 35 U.S.C. §102(e) based on Short are respectfully requested.

Claim 1 was rejected under 35 U.S.C. §102(b) based on U.S. Pat. No. 5,884,024 to Lim *et al.* ("Lim"). This rejection is respectfully traversed. It is respectfully submitted that the amendment to claim 1 fully obviates the grounds for the rejection.

Claim 1, as amended, is patentable over Lim at least because this claim recites a system for control and supervision of residential control in a broadband network comprising a plurality of hardware and software broadband network dedicated units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, said plurality of units is configured to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, said protocol server keeping a record of all assigned addresses to said policy server; to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when a network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services; and to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Lim does not describe a system including these features. Therefore, Lim does not describe each and every feature recited by claim 1 and, as a result, cannot anticipate this claim.

Lim discloses an apparatus for allocation of IP addresses that discourages IP address misuse. (col. 2, lines 40-43) Lim also discloses a network that includes a secure DHCP relay agent that forwards DHCP messages between the client systems and the DHCP servers. (see col. 2, lines 52-54) However, it is respectfully submitted that Lim does not disclose, teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured (1) to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, the protocol server keeping a record of all assigned addresses to said policy server or (2) to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when a network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services or (3) to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Lim does not describe a system including these features. Accordingly, reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) based on Lim are respectfully requested.

Claim 8 was rejected under 35 U.S.C. §103(a) based on Lim as applied to claim 1 in view of U.S. Pat. No. 6, 374, 307 to Ristau *et al.* ("Ristau"). The rejection is respectfully traversed.

Claim 8 depends from claim 1 and is patentable over Lim for the reasons provided above in connection with claim 1. Lim fails to disclose, teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, the protocol server keeping a record of all assigned addresses to said policy server; to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services; and to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration.

Ristàu fails to disclose, teach or suggest these deficiencies. Ristau discloses an optical Internet backbone network communication system. (see col. 6, lines 63-65) Ristau also discloses that the system uses a variable magnification mirror to split-off a sample of the DWDM-carrier through traffic. (see col. 6, lines 28-30) Ristau further discloses that this sample is then processed through a CISCO 12000 gigabit switch router such that billing information is output that is useful to an optical Internet backbone carrier. (see col. 6, lines 30-33) However, Ristau does not disclose, teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured (1) to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, the protocol server keeping a record of all assigned addresses to said policy server or (2) to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services or (3) to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Therefore, even assuming it would have been obvious to combine the references, which Applicant does not concede, the combination of the

cited references would not result in the invention of claim 8. Accordingly, reconsideration and withdrawal of the rejection of claim 8 under 35 U.S.C. §103(a) based on Lim as applied to claim 1 in view of Ristau are respectfully requested.

Claim 2 was rejected under 35 U.S.C. §103(a) based on Lim in view of U.S. Pat. No. 5, 894,479 to Mohammed and further in view of what would have allegedly been obvious to one of ordinary skill in the art at the time the applicant's invention was made. The rejection is respectfully traversed.

Claim 2 depends from claim 1 and is patentable over Lim for the reasons provided above in connection with claim 1. Lim does not disclose, teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, the protocol server keeping a record of all assigned addresses to said policy server; to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when a network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services; and to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration.

Mohammed does not to disclose, teach or suggest these deficiencies. Mohammed discloses a method for forcing the server to send all downstream data to the client using the downstream device including the steps of: (1) establishing a connection between the server and the client using the upstream device; (2) constructing a start-up packet in the client; (3) transferring the start-up packet from the client to the server using a special port; and, (4) adding an entry for said client into the data structure in response to the start-up packet. (see Abstract) However, Mohammed fails to disclose, teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured (1) to assure a class of service for specific types of customer equipment while denying attempts to lease additional customer addresses through said protocol server, the protocol server keeping a record of all assigned addresses to said policy server; or (2) to provide forced direction for network login procedure by redirecting a customers browser to a

predetermined login procedure when network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services; or (3) to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Therefore, even assuming it would have been obvious to combine the references, which Applicant does not concede, the combination of the cited references would not result in the invention of claim 2.

With respect to the Official Notice taken by the Examiner, Applicant submits that an Official Notice unsupported by documentary evidence should only be taken by the Examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. (See MPEP 21434.03, emphasis added) In addition, it is respectfully submitted that general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings cannot support an obviousness rejection. *Id.* It is respectfully submitted that the Examiner has failed to provide some concrete evidence to support his finding. Therefore, it is respectfully submitted that the taking of Official Notice by the Examiner is improper. Accordingly, reconsideration and withdrawal of the rejection of claim 2 under 35 U.S.C. §103(a) based on Lim in view of Mohammed are respectfully requested.

Claims 1, 3, 5, 6, 9 and 10 were rejected under 35 U.S.C. §103(a) based on U.S. Pat. No. 6,009,103 to Woundy in view of U.S. Pat. No. 6,138,161 to Reynolds *et al.* ("Reynolds"). This rejection is respectfully traversed. It is respectfully submitted that the amendment to claim 1 fully obviates the grounds for the rejection.

Claim 1, as amended, recites a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured, *inter alia*, (1) to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services; or (2) to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Woundy does not describe a system including these features.

Woundy fails to disclose, teach or suggest these features. Woundy discloses a method and system for automatic allocation of resources in a network. Woundy specifically discloses a broadband cable data distribution system 10 having at least one DHCP server 12 functioning to automatically allocate and assign network resources/IP addresses to a plurality of user terminals 14 having a computer 16 connected to server via a cable modem 18 and a coaxial cable 20. (see col. 2, lines 60-66)

Reynolds does not disclose, teach or suggest these deficiencies. Reynolds, discloses a method and system for managing I/O transmission in a Fibre Channel network that maintains target and initiator states across address changes in the Fibre Channel network to eliminate or at least substantially reduce limitations associated with known such systems and methods, including the problems of limited network performance, loss of data in certain applications, and general application failures. (see col. 3, lines 36-44) However, Reynolds fails to teach or suggest a system comprising a plurality of units, including at least a protocol server, and a membership policy server, wherein in order to provide service differentiation for customers, the plurality of units is configured, *inter alia*, (1) to provide forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when a network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services or (2) to provide abuse and anti-spoof protection by adjusting border gateway control routing tables in real time with respect to said protocol for auto-configuration. Therefore, even assuming it would have been obvious to combine the references, which Applicant does not concede, the combination of the cited references would not result in the invention of claim 1. Claims 3, 5, 6, 9 and 10 depend from claim 1 and are patentable over the combination of Woundy and Reynolds for at least the reasons set forth above. Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3, 5, 6, 9 and 10 under 35 U.S.C. §103(a) based on Woundy in view of Reynolds are respectfully requested.

Claims 11-19 are newly added. Claim 11 includes all of the features of original claims 1 and 4. Applicant notes that claim 4 has not been rejected under 35 U.S.C. §102 or 35 U.S.C. §103. Therefore, it is respectfully submitted that claim 11 is allowable. Claims 12-19 are allowable by virtue of their dependency from claim 11.

Applicant has addressed the Examiner's rejections and objections and respectfully submits that the application is in condition for allowance. A notice to the effect is earnestly solicited.

If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975 (reference # 070051-0272745). The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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